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APPLICATION NO.	FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/773,131 01/31/2001		1/2001	Michel Marcel Jose Decre	PHNL000078	5393	
24737	7590	04/14/2003				
		CS NORTH A	EXAMINER			
	PLAINS RD WN, NY 105	91	JOLLEY, KIRSTEN			
				ART UNIT	PAPER NUMBER	
				1762	A	
				DATE MAILED: 04/14/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)	
•		09/773,131	DECRE, MICHEL M	MARCEL JOSE
Office Action Summary		Examiner	Art Unit	
		Kirsten Crockford Jolley	1762	
Period	The MAILING DATE of this communication ap for Reply	pears on the cover sheet wit	h the correspondence addi	ress
THI - E at - If - If - F - A	SHORTENED STATUTORY PERIOD FOR REPLE MAILING DATE OF THIS COMMUNICATION. Attensions of time may be available under the provisions of 37 CFR 1.7 fter SIX (6) MONTHS from the mailing date of this communication, the period for reply specified above is less than thirty (30) days, a rep NO period for reply is specified above, the maximum statutory period ailure to reply within the set or extended period for reply will, by statuting reply received by the Office later than three months after the mailing armed patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a re ly within the statutory minimum of thirty will apply and will expire SIX (6) MONT e, cause the application to become ABA	ply be timely filed (30) days will be considered timely HS from the mailing date of this com NDONED (35 U.S.C. § 133).	munication
1)[Responsive to communication(s) filed on <u>05</u>	February 2003		
2a)[nis action is non-final.		
3)[merits is
4)[Claim(s) <u>1-14</u> is/are pending in the application	n.		
•	4a) Of the above claim(s) <u>9-14</u> is/are withdraw			
5)[Claim(s) is/are allowed.			
6)[Claim(s) <u>1-8</u> is/are rejected.			
7)[Claim(s) is/are objected to.			
8)[Claim(s) are subject to restriction and/o	or election requirement.		
Applica	ation Papers			
9)[The specification is objected to by the Examine	er.		
10)[☐ The drawing(s) filed on is/are: a)☐ acce	pted or b) objected to by th	e Examiner.	
	Applicant may not request that any objection to the			
11)[The proposed drawing correction filed on	_ is: a) 🔲 approved b) 🗍 dis	sapproved by the Examiner.	
	If approved, corrected drawings are required in re	ply to this Office action.		
12)[The oath or declaration is objected to by the Ex	kaminer.		
Priority	/ under 35 U.S.C. §§ 119 and 120			
13)[Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. §	119(a)-(d) or (f).	
;	a)⊠ All b)□ Some * c)□ None of:			
	1. Certified copies of the priority document	ts have been received.		
	2. Certified copies of the priority document	ts have been received in Ap	plication No	
	3. Copies of the certified copies of the prio application from the International But See the attached detailed Office action for a list	ıreau (PCT Rule 17.2(a)).		tage
	Acknowledgment is made of a claim for domest			pplication).
	a) The translation of the foreign language pro Acknowledgment is made of a claim for domest	ovisional application has be	en received.	. "
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1) 🔀 No 2) 🔲 No	ortice of References Cited (PTO-892) Itice of Draftsperson's Patent Drawing Review (PTO-948) Formation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of In	ummary (PTO-413) Paper No(s) formal Patent Application (PTO-	

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DETAILED ACTION

Response to Amendment/Arguments

1. The rejections over the prior art of Scheu et al. have been withdrawn in response to Applicant's amendments to the claims. However, the claims are newly rejected as set forth below. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Election/Restriction

2. This application contains claims 8-14 drawn to an invention nonelected with traverse in Paper No. 6. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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In claim 1, lines 8-9, the phrase "wherein the substantially circumferential contact limits fluid flow therebetween to, *at most, capillary flow*" (emphasis added) appears to contain new matter. It is the Examiner's position that this limitation is new matter because the specification states at page 3, lines 11-13:

"The absence of a chink also *prevents* capillary flow of liquid through said chink. Although avoiding a chink is important, in practice, a very small chink *which does not cause substantial capillary flow* of coating liquid may be present and acceptable" (emphasis added).

Therefore, it is the Examiner's position that the specification does not teach that capillary flow is acceptable; in contrast, the claims read on including not only capillary flow, but also substantial capillary flow. If Applicant can locate disclosure of this limitation, then they should so state on the record and the new matter rejection will be withdrawn.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1-2 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Gibson et al. (US 6,495,205).

Gibson et al. discloses a method of coating a circular substrate comprising the steps of: providing a coating on the substrate surface by applying a liquid from an extrusion device (col. 6,

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lines 53-67) where the substrate is present in a separate extension body which has a surface substantially flush with the surface of the substrate (see Figure 6 and col. 10, lines 40-49); spinning the substrate to form a uniform coating (col. 8, lines 53-56 and col. 10). Col. 11, lines 25-50 are directed to providing the circumferential contact of the periphery of the substrate and the extension body with limited fluid flow therebetween; specifically, Gibson et al. is directed to preventing capillary flow in the circumferential contact area. While Gibson et al. does not specifically teach a step of partial solidification of the liquid prior to separation of the substrate and extension body, it is the Examiner's position that some of the volatile solvent in Gibson et al.'s coating composition (discussed at col. 1, lines 45-47) would inherently evaporate at least a little bit, thus causing at least some solidification of the coating material applied.

Additionally, it is noted that Gibson et al. is not specifically directed to the coating of optical substrates. However, the preamble is not a limitation on the claims if it merely states the purpose or intended use, and the remainder of the claim completely defines the invention independent of the preamble. *Stewart-Warner Corp. v. City of Pontiac, Mich.* 219 USPQ 1162; *Marston v. J.C. Penny Co., Inc.* 148 USPQ 25; and *Kropa v. Robie and Mahlman*, 88 USPQ 478.

As to claim 2, Gibson et al. illustrates the use of an extension body 510 having a circular shape in Figure 5. As to claim 7, Gibson et al. illustrates an extension body 510 comprised of two parts with surfaces substantially flush with the surface of the substrate in Figure 10.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson et al. Gibson et al. is applied for the reasons discussed above in paragraph 6.

As to claims 3-4, Gibson et al. lacks a teaching that the extension body 510 has an outer periphery having a polygonal, or regular polygonal shape. Gibson et al. teaches at col. 14, lines 25-39, that the bead forming surface/extension body of its invention may be adapted to use with substrates having size and shape other than circular. It would have been obvious for one having ordinary skill in the art to have modified the process of Gibson et al. to use an extension body 510 having a polygonal or regular polygonal shape, a shape corresponding to the shape of the substrate for example, as a matter of design preference depending upon the size and shape of the substrate to be coated.

With respect to claim 5, Gibson et al. lacks a teaching of the material of the extension body, and specifically that it is substantially the same material as that of the substrate. It is the Examiner's position that it would have been obvious for one having ordinary skill in the art to have used a material for the extension body in Gibson et al. that is substantially similar to that of the substrate since one would desire that the coating material flows and sticks onto the substrate and the extension body in the same amount and in the same way, therefore forming a uniform coating on top of both surfaces. If this is not the case, and the surface of the extension body has a surface where the coating does not spread as easily as on the substrate surface, then the coating material would bead up at the edge of the substrate and negate the purpose of spinning to provide a uniform coating. Alternatively, if the surface of the extension body has a surface where the

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coating material spreads significantly more quickly than on the substrate surface, then the coating material would be pulled from the edge of the substrate by the surface tension of the coating already on the surface of the extension body, thus also resulting in a non-uniform coating on the substrate.

As to claim 6, Gibson et al. lacks a teaching of the material of the extension body, or specifically that it comprises a material to which the coating adheres relatively poorly. It is the Examiner's position that it would have been obvious for one having ordinary skill in the art to have used a coating on the extension body where the coating material does not adhere well because then it will be easier to clean, particularly since it would be necessary to clean the surface of the extension body between each application of coating material in order to achieve subsequent uniform coatings thereon.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson et al. as applied to claim 1 above, and further in view of Scheu et al. (US 4,024,835).

Gibson et al. lacks a teaching of solidifying the photoresist coating material in its coating process by exposure to UV light. Scheu et al. is similarly directed to a photoresist coating process. Scheu et al. teaches a step of exposing the substrate to UV light after it is coated on the substrate. It would have been obvious to have similarly exposed the photoresist coating of Gibson et al. to UV light after it is coated on the substrate as such is a well known method of subsequentially processing photoresist coatings.

Conclusion

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- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of Tanimoto (US 5,250,116) is additionally cited. Tanimoto teaches a spin chuck holding a substrate and an extension body having circumferential contact with the periphery of the substrate, where the surface of the extension body is substantially flush with the substrate surface. While Tanimoto does not teach that circumferential contact limits fluid flow to at most capillary flow, it is the Examiner's position that Tanimoto would prevent capillary flow because Tanimoto teaches a gap of only 1mm (col. 3, lines 36-37) and because Tanimoto teaches that the coating thickness on the extension body is the same as on the substrate surface (col. 4, lines 9-15). In order for the thickness to be the same on the extension body and on the substrate surface, no fluid must be lost in the gap between the substrate and the extension body.
- 11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten Crockford Jolley whose telephone number is 703-306-5461. The examiner can normally be reached on Monday to Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 703-308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1193.

kej

April 10, 2003

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SUPERVISION & SUPERVISION AT EXAMINER